

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number
WO 2004/110088 A1

(51) International Patent Classification⁷:
G01S 5/14

H04Q 7/32,

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:

PCT/IB2003/002176

(22) International Filing Date: 10 June 2003 (10.06.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (*for all designated States except US*): **NOKIA CORPORATION** [FI/FI]; Keilalahdentie 4, FIN-02150 Espoo (FI).

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

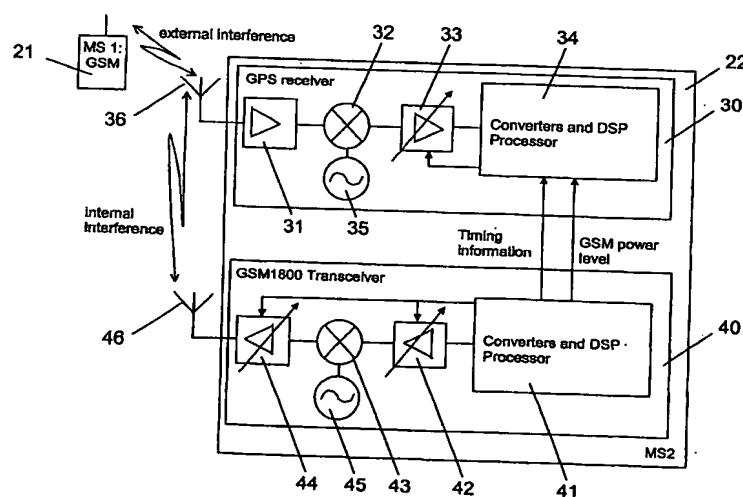
(75) Inventors/Applicants (*for US only*): **ROUSU, Seppo** [FI/FI]; Sahankuja 1, FIN-90800 Oulu (FI). **LEINONEN, Marko** [FI/FI]; Rantapellontie 1C9, FIN-90520 Oulu (FI).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVING THE PERFORMANCE OF A RECEIVER IN INTERFERING CONDITIONS



(57) Abstract: The invention relates to a device 22 comprising a communication system transceiver 40 for exchanging signals in a first frequency band and a receiver 30 for receiving signals in a second frequency band. In order to improve the performance of the receiver, it is proposed that the device comprises a processing portion 34 detecting the presence of signals interfering with the signals in the second frequency band. The processing portion further determines a timing pattern for interfering signals based on a timing information which is indicative of the timing for transmissions employed by the transceiver 40. The processing portion then causes a manipulation of signals reaching the receiver 30 during intervals defined by the determined timing pattern, in order to reduce a performance degradation due to interfering signals originating from a transmitter 21 employing the same timing for transmissions as the transceiver 40. The invention relates equally to a corresponding method.

WO 2004/110088 A1